



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,314	04/29/2005	Simon Richard Stebbing	121629-05042730	4747
20583	7590	03/12/2009	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			D'ANIELLO, NICHOLAS P	
		ART UNIT	PAPER NUMBER	
		1793		
		MAIL DATE		DELIVERY MODE
		03/12/2009		PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/533,314

Filing Date: April 29, 2005

Appellant(s): STEBBING ET AL.

---

Paul L. Sharer  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 1/26/2009 appealing from the Office action mailed 6/25/2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,478,500	SWIFT	12-1995
WO 01/94512	ARAYA	12-2001

WO 00/12669

ALDCROFT

3-2000

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Araya (International Publication No. WO 01/94512) in view of Swift et al. (US Patent No. 5,478,500) and Aldcroft et al. (International Publication No. WO 00/12669).

Araya teaches a zeolite detergent composition comprising an aluminosilicate and salt slurry identical to parts (a) and (b) of independent claim 1 ( see claim 1 of Araya) this slurry is prepared by mixing powders of the components (see page 4 lines 21-38).

The claim differs from Araya in calling for part (c), silica having a surface area greater than 500 m<sup>2</sup>/g and pore volume of less than 2.1 cm<sup>3</sup>/g. However, Swift et al., *also drawn to zeolite detergent compositions and manufacturing*, teaches the use of silica to prevent the agglomeration (added as a flow aid) in the preparation of detergents (column 13, lines 28-33). Swift is silent regarding the silica's surface area and pore volume. However, Aldcroft et al., *also drawn to detergent compositions and*

Art Unit: 1793

*manufacturing*, teaches a granular composition particularly suitable for incorporation in washing powder formulations which is amorphous silica that has a surface area of at least 550 m<sup>2</sup>/g and pore volume between 1 and 2.5 ml/g (cm<sup>3</sup>/g) which disintegrates when dissolved in water (see abstract and claim 1 of Aldcroft et al.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include particulate silica in the composition of Araya et al. to act as a flow aid during manufacturing (as taught by Swift), particularly a silica has a surface area greater than 500 m<sup>2</sup>/g and pore volume of less than 2.1 cm<sup>2</sup>/g so that it disintegrates in water (as taught by Aldcroft et al.).

In regard to claim 2, Araya teaches that sodium is a suitable ion for the first metal moiety, M (page 3, lines 6-16).

Regarding claim 3, Araya teaches that the aluminosilicate is a zeolite P, zeolite A or zeolite X (see claim 3 of Araya).

Re claim 4, Araya teaches that aluminum is a suitable ion for the second metal salt (page 3, lines 6-16).

Re claim 5, Araya teaches that 5 to 9 is the preferred pH for the aqueous composition (page 4, lines 10-14).

Re claim 6, Araya teaches that the average particle size of the zeolites is between 0.1 and 20 microns (page 3, lines 28-31).

Re claim 7, in Example 4 on page 13 Araya teaches a suitable composition for the slurry where 35% by weight is the zeolite (alumina silicate).

Re claim 8, Aldcroft et al. teaches that the surface area of the silica preferably has a surface area above 600 m<sup>2</sup>/g (page 3, lines 36-38).

Re claim 9, Aldcroft et al. teaches that the pore volume is as low as 1 ml/g (cm<sup>3</sup>/g) (abstract, page 3, lines 5-11).

Re claim 10, Swift et al. teaches adding silica with a particle size between 1 and 3 microns as a flow agent (column 13, lines 28-33).

Re claim 11, Swift et al. teaches adding about 0.1% to about 1.5% by weight silica as a flow agent (column 13, lines 28-33).

Re claim 12, in Example 4 on page 13 Araya teaches a suitable metal salt is aluminum sulphate.

**(10) Response to Argument**

As noted by appellant in the arguments the primary reference (Araya) teaches the aqueous slurry containing verbatim the claimed components (a) and (b) (see claim 1 of Araya). The instant independent claim only differing from the reference in calling for silica with a specific surface area and pore size, it is also noted that no particular amount of silica is required.

Appellant contends that Swift is drawn to solid agglomerates and not an aqueous slurry and therefore the combination is not valid. However, appellant fails to mention that the aqueous slurry of Araya is first prepared as a combination of powders that must be mixed (see page 4 lines 21-38).

Therefore, as asserted in the rejection above, it would have been obvious to one of ordinary skill in the art at the time of the invention to admix silica as a flow aid to the powdered mixture of Araya to aid in the powder processing as taught by Swift (column 13 "Step D"). Furthermore, it would have been obvious to use silica with the claimed surface area and pore volume because this silica disintegrates in water (see abstract of Aldcroft et al.).

To state simply, the detergent composition of Araya starts as a powder mixture (and benefits from the addition of flow aiding silica as taught by Swift) and eventually becomes an aqueous slurry (such as claimed in claim 1 of Araya) where the silica simply disintegrates into the water (abstract of Aldcroft et al.).

Appellant's contention that Araya, Swift and Aldcroft et al. are non-analogous art is unfounded as all of the references are drawn to washing powder/detergent compositions and manufacturing.

On page 12 of the brief appellant attempts to establish an unexpected result concerning the viscosity of the aqueous slurry however the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). As such appellant argues that Swift does not teach the viscosity advantages offered by the addition of silica however this point is moot. It is further noted that these "unexpected results" (shown in the table on page 12 of the brief, 1% silica) are not commensurate in scope with the claim as the amount of silica is undefined in the claim.

In summary, appellant's arguments focus on the claimed composition being a slurry and not solid granules however the composition of Araya undergoes solid powder processing and mixing prior to being a slurry and would benefit from the addition of a flow aid such as silica (taught by Swift), where the pore size and surface area would have been an obvious selection in view of Aldcroft et al. who teaches silica with such properties is especially suitable for detergent compositions because it effectively disintegrates when contacts with water (i.e. when it becomes a slurry).

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Nicholas P D'Aniello/

Examiner, Art Unit 1793

Conferees:

/Jessica L. Ward/

Supervisory Patent Examiner, Art Unit 1793

/Gregory L Mills/

Supervisory Patent Examiner, Art Unit 1700